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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,392

11/14/2005

Theo Burchard

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WASHINGTON, DC 20005

EXAMINER

CORDRAY, DENNIS R

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No. 10/528,392	Applicant(s) BURCHARD ET AL.	
	Examiner DENNIS CORDRAY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/18/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 7-9 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites that, "in the case of a plurality of films, they have different stretch." The meaning of the word "stretch" is unclear. Do the films on either side of the paper have differing elasticities from each other or from the paper? Have the films on either side of the paper been stretched prior to laminating them to the paper? Are there multiple film layers adjacent to each other, each having a different elasticity than the others? Is some other meaning intended for the word?

Furthermore, the intended meaning of "in the case of a plurality of films" is not clear. Claim 5 depends from Claim 1, which recites that the paper layer is coated with film on both sides, which indicates a plurality of films, one on each side. Is the intent of the claim to indicate that there may be multiple film layers, one on top of the other?

Claim 6 recites the term "annual fibers." The meaning of annual is not clear. The closest possible meaning the Examiner can determine is that the fibers come from an annual plant, or one whose life cycle is completed in one year.

Regarding Claim 7, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered

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indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 7 recites the broad recitation "synthetic fibers", and the claim also recites "polyamide fibers" which is the narrower statement of the range/limitation.

Claims 8, 9 and 12 recite the limitation "paper ply" in Claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "to form total information." The meaning of total information is not clear. Does it mean that there is no information on the security outside of the security features?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-10, 13-15, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Howland et al (5868902).

Claims 1, 3, 13-15, 20 and 22: Howland et al discloses a security paper and method of making the paper, the method comprising producing the paper in a paper machine, drying the paper and then coating the paper on both surfaces with a coating containing polyurethane (Abs; col 2, lines 17-24; col 4, lines 1-5; cols 5-9, Examples). The coating forms a film, or thin layer, that increases the soil resistance, adhesion of print and the embossing of intaglio printing on the paper as well as providing security features. In some embodiments, the coating comprises an iridescent, phosphorescent or fluorescent pigment or magnetic particles as security features (col 3, lines 32-61). In other embodiments, a foil, hologram or kinogram is affixed to the paper (inherently on the film) after it is made and coated, either before or after printing (Claims 1, 16 and 17). Any paper can be creased, thus the paper is creasable. The paper can be a banknote (col 5, line 10).

Claim 7: The paper is made from natural and/or synthetic fibers (col 4, lines 6-7).

Claims 2, 8-10: The paper layer comprises a security feature, such as a watermark and/or embedded or windowed security thread which incorporates visual or covert security elements (col 4, lines 16-19). The paper layer is interrupted where the embedded thread or window occurs.

Claims 4-6, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howland et al (5868902) as evidenced by Haylock (Paper, Its making, merchanting and usage).

Claims 4 and 16: The paper can be printed via intaglio printing (col 4, lines 53-54; cols 5-9, Examples). Although not explicitly disclosed, printing images would have been obvious to one of ordinary skill in the art as functionally equivalent options. Visual and covert images have been printed on banknotes and checks for decades.

Claim 5: The film layer, being of different material from the paper, would obviously have different stretching properties from the paper.

Claims 6 and 21: Cotton would have been obvious to one of ordinary skill in the art as a typical source of natural annual fibers (if evidence is needed, see Haylock, p 22).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howland et al in view of Nigam (US 2003/0059636).

Howland et al does not disclose polyamide fibers.

Nigam discloses that synthetic fibers used to make printing papers include polyamide, polyesters, polyethylene and polyacrylic fibers (Abs; p 2, par 18)..

The art of Howland et al, Nigam and the instant invention is analogous as pertaining to the manufacture of printable papers. Absent convincing evidence of unexpected properties derived therefrom, it would have been obvious to one of ordinary skill in the art at the time of the invention use polyamide fibers in the paper layer of

Howland et al in view of Hoeppner et al well known and functionally equivalent synthetic fibers.

Claims 5, 11, 12 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howland et al in view of Hoeppner et al (US 2002/0022112).

Howland et al does not disclose extrusion or cold lamination of a film. Howland et al also does not disclose that security features are in register with one another.

Hoeppner et al discloses a multilayer security paper and process for making, the process comprising printing a paper on one or both sides, then extruding a plastic film layer to one or both sides of the paper. The extruded film comprises laser active pigments that permit subsequent personalization with a laser. The paper thus coated can be printed and/or embossed with various additional security features, and further marked, engraved or perforated using a laser (Abs; p 1, pars 14 and 16; p 3, pars 40-45). The coated and printed papers can be coated with an adhesive and further laminated with an upper and lower covering film, the surface of which can be embossed and/or printed with security colors (p 3, pars 46-49). Additional films can be laminated thereon (p 3, pars 50 and 51). Heat is not required, thus the films are cold-laminated. The different layers have different properties, such as being doped, being sensitive to laser light, having integrated security features or materials, etc. (p 2, par 29).

Hoeppner et al discloses advantages of the extrusion and lamination processes that include accurate register of the various security features in the layers (p 1, par 13; p

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2, pars 22-24; p 3, par 54). Some security features can be lasered into any desired layer.

Hoepfner et al discloses that the process can be used to produce value documents and other security papers. The carrier paper (paper layer) can comprise various security features, such as threads, holograms, etc. (p 1, par 4). Banknotes would have been obvious as a well known value documents.

The art of Howland et al, Hoepfner et al and the instant invention is analogous as pertaining to the manufacture of multilayered security papers. Absent convincing evidence of unexpected properties derived therefrom, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply a plastic layer to the paper layer of Howland et al in view of Hoepfner et al by extrusion or by cold lamination using an adhesive as well known and functionally equivalent options that provide accurately registered layers in which the security features are in register with one another. The motivation to register security features would have been to provide products consistent in appearance and easily identified but which are difficult to forge due to multiple security features. Since the laminated layers have different properties, they would obviously have different stretching properties. Absent convincing evidence of unexpected properties derived therefrom, using a water-soluble adhesive would have been obvious as a functionally equivalent option.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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